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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/746,563

12/22/2000

William E. Glenn

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1691

7590

07/20/2004

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EXAMINER

HENN, TIMOTHY J

ART UNIT

PAPER NUMBER

2612

11

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,563

Applicant(s)

GLENN, WILLIAM E.

Examiner

Timothy J Henn

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) 1-4, 7 and 8 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 5, 6, 9 and 10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Please note that the examiner of record has changed. All future correspondence should be directed to Timothy J. Henn whose information is provided at the end of this office action.

Election/Restrictions

2. Applicant's election of species II (claims 5, 6, 9 and 10) in the reply filed on May 3, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

3. New corrected drawings are required in this application because hand drawn figures are difficult to read. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because the use of legal terminology. Correction is required. See MPEP § 608.01(b).

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5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. *The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.* The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The disclosure is objected to because of the following informalities:

- i. On page 3, replace "methodis" with --method is--
- ii. On page 5, replace "can be utilize" with --can be utilized--
- iii. On page 8, replace "R, C. and B" with --R, G, and B--

Appropriate correction is required.

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (US 6,577,341).

[claim 9]

In regard to claim 9, note that Yamada et al. discloses an apparatus for producing electronic video signals representative of color images of a scene, comprising: a sensor having a color filter thereover (Figure 1, Item 34); a motion picture film camera type of lens system that focuses light from said image onto said color filter and sensor (Figure 1, Item 33); and means for producing electronic video signals from the output of said sensor (c. 75, ll. 45-47); said sensor comprising a sensor array having alternate lines offset by half a pixel spacing and said color filter having repeating R, G, and B patterns offset on successive lines so that R pixels are arranged diagonally, G pixels are arranged diagonally, and B pixels are arranged diagonally (Figure 44; c. 74, l. 17 - c. 75, l. 53).

[claim 10]

In regard to claim 10, note that Yamada et al. discloses placing a low-pass prefilter interposed before the color filter (Figures 45-50; c. 75, l. 54 - c. 82, l. 7; c. 24, ll. 13-27).

[claim 5 and 6]

Claims 5 and 6 are method claims corresponding to apparatus claims 9 and 10. Therefore claims 5 and 6 are analyzed and rejected as previously discussed with respect to claims 9 and 10.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al. (US 5,805,217) in view of Morisawa et al. (US 4,611,243).

[claim 9]

In regard to claim 9, note that Lu et al. discloses an apparatus for producing electronic video signals representative of color images of a scene, comprising: a sensor having a color filter thereover (Figure 1); and means for producing electronic video signals from the output of said sensor (c. 4, ll. 43-45); said sensor comprising a sensor array having alternate lines offset by half a pixel spacing and said color filter having repeating R, G, and B patterns offset on successive lines so that R pixels are arranged diagonally, G pixels are arranged diagonally, and B pixels are arranged diagonally (Figure 4a). Therefore it can be seen that Lu et al. lacks a motion picture film camera type of lens system that focuses light from the image onto the color filter and sensor.

However, it is well known in the art to use lens systems to properly focus light onto image sensor arrays in order to take higher quality pictures (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to include a lens system in the camera of Lu in order to create properly focused high quality images.

[claim 5]

Claim 5 is a method claim corresponding to apparatus claim 9. Therefore, claim 5 is analyzed and rejected as previously discussed with respect to claim 9.

12. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al. (US 5,805,217) in view of Morisawa et al. (US 4,611,243).

[claim 10]

In regard to claim 10, note that Lu et al. discloses all limitations except for an optical low-pass prefilter placed before the color filter.

Morisawa et al. teaches placing optical low-pass filters before image sensors in order to create moiré-free images (c. 3, ll. 20-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an optical low-pass filter as taught by Morisawa et al. to create moiré-free images.

[claim 6]

Claim 6 is a method claim corresponding to apparatus claim 10. Therefore, claim 6 is analyzed and rejected as previously discussed with respect to claim 10.

Conclusion

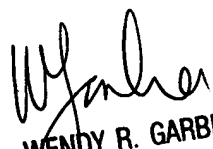
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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
6/25/2004


WENDY R. GARBER
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